

Transforming polymorphic process model to petri net: a formal way for validating workflow-based web service composition

Abstract:

Workflow-based web service composition (WB-WSC) is one of the four main categories of web service composition approaches. This category lacks supporting quality of services (QoS). Polymorphic Process Model (PPM) is a WB-WSC that supports both reference process and service-based multi-enterprises processes. Through this paper an initial work was proposed in which PPM was transformed to Petri Net. Also the final Petri Net model was evaluated structurally. It was also shown that how Petri Net can help to calculate the quality of service in a WB-WSC approach.